DOCUMENT RESUME

ED 118 414 SE 020 228

AUTHOR Brainard, Alan J.
TITLE Teaching Win-Win Better Prepares Students for Subsequent Experiences in Life.
PUB DATE Jun 75
NOTE 9p.; Paper presented at the Annual Meeting of the American Society for Engineering Education (Ft. Collins, Colorado, June 16-19, 1975)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS Autoinstructional Methods; Educational Objectives; *Educational Philosophy; *Engineering Education; *Higher Education; *Instruction; Motivation; Science Education; Student Development
IDENTIFIERS *Personalized System of Instruction; PSI

ABSTRACT

The psychology of competition and winning, especially in relation to learning and motivation, is discussed. The Personalized System of Instruction (PSI) approach to coursework is proposed as a means of using the winning philosophy in education. Also suggested is the inclusion into coursework design of a form of rhetoric developed by Carl Rogers that emphasizes cooperation, harmony, understanding, and empathy. (MLH)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED118414

Event Number 1635

AMERICAN SOCIETY FOR ENGINEERING EDUCATION

ANNUAL CONFERENCE, JUNE 16-19, 1975

COLORADO STATE UNIVERSITY

FT. COLLINS, CO 80521

Teaching Win-Win Better Prepares Students for Subsequent Experiences in Life

Alan J. Brainard

Associate Professor of Chemical and
Petroleum Engineering
and
Director, Freshman Engineering Program

University of Pittsburgh
Pittsburgh, Pennsylvania 15261

SE 020 228

"It is not enough to just compete. Winning is very important. Maybe more important than ever."

Gerald R. Ford (1)

"The American way of life always has been, and I hope always will be based on competition."

Jack Nicklaus (2)

"When we are able to free the individual from defensiveness, so that he is open to the wide range of his own needs, as well as the wide range of environmental and social demands, his reactions may be trusted to be positive, forward-moving, constructive. . . . He will be aggressive in situations in which aggression is realistically appropriate, but there will be no runaway need for aggression."

Carl R. Rogers (3)

Competition is valued more by some individuals than others. The politician and the athlete advocate competition and take great pride in the goals that they have realized in their respective arenas. By contrast, the psychologist tells us that a "free man" will not be continually driven by aggressive urges but will find a more satisfying life by working in cooperation with rather than in competition with his fellowman. This paper will consider whether an educational approach that develops a "win-lose" or a "win-win" attitude in our students makes more sense in our contemporary world. The paper is based on the following assumptions:

ASSUMPTION NO. 1

Everyone likes to "win". (The word "win" is used in a broader context than in the winning of an athletic even. or the winning of a political race.) Winning will be taken to mean the realization of goals.

ASSUMPTION NO. 2

"Winning" (achieving goals) is a worthwhile objective so long as the victor does not view the world as the enemy and other persons as opponents.

We have likely all been raised in a win-lose environment. Childhood games, and conventional school grading practices, are two of a number of examples that quickly come to mind when reviewing my own childhood

experiences that were win-lose. Where these experiences beneficial? There are those who would argue that achievement follows motivation and motivation is greatly enhanced in a competitive environment. This picture seems to fit our experiences and one is tempted to declare that teaching win-lose is a format that is consistent with an individual's experiences in later life.

Psychology tells us otherwise, however.

> "Competition against oneself, the attempt to improve, is a strong motivation for those whose self-concept is expressed in a high level of aspiration. Competition against others is strong motivation only for those whose self-concept and need structure demand such evidence of status and esteem. For others, the competitive symbols are perceived as evidence of or references for knowledge of results in their work. Still others see these symbols not as competitive, but as evidence of the teacher's regard or praise, or as strictly secondary satisfiers having little direct relationship to the learning itself. In short, we have little evidence that the conventional focus on academic competition has any positive motivational value for learning." (4)

Not only do I feel that the chain competition-motivation-achievement is more mythical than real, I also believe that competition is harmful to group problem-solving. This latter view is shared by George Prince, one of the developers of Synectics*, a proven method of group problem-solving that enhances creativity.

---

*Synectics, from the Greek, means the joining together of different and apparently irrevelant elements. Synectics theory applies to the integration of diverse individuals into a problem-stating, problem-solving group. Synectics is a group (usually four to seven people) activity that puts into practice the following phases:

"Phase 1: Problem as given
Phase 2: Making the strange familiar
Phase 3: Problem as understood
Phase 4: Operational mechanisms
Phase 5: The familiar made strange
Phase 6: Psychological states
Phase 7: States integrated with problem
Phase 8: Viewpoint
Phase 9: Solution or research target." (5)

In discussing competition Prince concludes:

> "But there is no question that in group problem solving, competition, in the usual sense, is destructive. I suspect that on a larger scale, competition for favor, respect, and advancement in a company is just as wasteful and destructive." (6)

The win-lose attitude (also referred to as mind set in this paper) forces an either-or, us-them manner of thinking. On the national scene, it is difficult to think of a better example of a win-lose mind set than the attitudes which fostered and sustained the Watergate break in and its subsequent cover-up.+ A win-lose mind set really precludes trying to listen, understand, consider alternatives, compromise, and co-operation in finding the best of many possible solutions to a given problem.

Having seen that teaching a win-lose approach to life has several drawbacks let us now examine the consequences of fostering a win-win approach. When one considers that our students are more likely to be working in groups rather than pitted against one another in private industry and government it becomes quite clear that their development proceed through win-win educational experiences. By helping our students assume a win-win mind set, they soon learn that they can win (realize their desired goals) without having to belittle the accomplishments of others. They will learn to view their fellowman as a potential ally not an adversary.

How can we promote this win-win approach? I feel that most PSI courses promote a win-win approach. All students can earn A grades; one student's success does not have to be tied to another student's failure. Some PSI courses report 70-100% of all students receiving A grades. For the past few years I have been teaching a freshman course in creative design. Students are divided into groups and given five-week design projects to complete. The projects usually require that they build a "vehicle" that is totally self controlled to accomplish a specific objective. For one problem there was a unique "winner" as the vehicle was expected to complete a race. For other problems all groups

---

+See the appendix for a portion of the text of a taped conversation between then President Nixon and his counsel John Dean held on September 15, 1972.

could be considered to be winners. The very obvious difference in attitude and to some degree performance between groups of students in the two cases was striking. While competition is present in both cases, in those circumstances leading to a unique winner a very hostile attitude does prevail. In both cases, students' creative powers were stimulated by various brainstorming and synectics sessions but apparently some of the lessons "taught" in those sessions were not learned.

In addition to the selection of the specific problem, how else can we introduce the win-win element into our courses? I suggest that if we employ a form of rhetoric developed by Carl Rogers that a win-win atmosphere will be present. Rogerian rhetoric emphasizes co-operation, harmony, respect, listening, understanding and empathy. A very illuminating contrast between traditional and Rogerian rhetoric has been provided by Mack (8) and the following table closely follows her development:

TRADITIONAL RHETORIC	ROGERIAL RHETORIC
1. The objective is to make your position prevail, to replace another's view with the <u>correct one.</u> Your mind is made up, fixed.	The objective is to create an environment conductive to co-operation, which may result in changes in <u>both</u> person's views. Your mind is open, flexible.
2. Changing the other person's mind means using logic, arguments, and <u>appeals to fear.</u>	Changing the other person's mind means <u>eliminating fear</u> and his sense of threat.
3. Dogmatic and evaluative language makes a strong, effective conclusion; neutral language is unpersuasive and thus not employed. The emotional power of language is to be exploited.	Dogmatic and evaluative language blocks communication; only neutral, descriptive language is effective in getting another Person to listen. Emotional language is to be defused.
4. Logic is a tool for defense and refutation. Context is ignored.	Logic is a tool to explore conditions under which <u>either view</u>, or both views are valid.
5. Defense is central. Listening is used only to refute rather than to consider the merits of the other person's view. Since his views are wrong he can have nothing to say.	Listening is central for understanding. The listener considers the merits of the other person's view and may learn from him.

6. Defense consists of building up your own character and attacking the other person's.	Gaining the other person's trust, even by admitting your own shortcomings is more important than defense.
7. The skills required are logic, persuasive language, and strong delivery.	The skills required are listening, empathy, honesty, courage, and nonjudgmental descriptive language.
8. This rhetoric is good for presenting solutions, demolishing other solutions, rallying those already in favor, and swaying those who are neutral. It is ineffective in small groups and interpersonal communications involving strong values and beliefs, and in problem solving and team situations.	This rhetoric is good for solving problems, resolving interpersonal conflict, and encouraging team-work. It is less effective without immediate oral feedback and in large group public meetings. It does take longer.
9. This rhetoric makes assumptions about people which culminate in a view based on a win-lose attitude. Winning is the end; competition the means. Both audience and opponent are seen as inferior, weak, and wrong. The speaker is superior and right. Most important is for the speaker to be understood, to assert his individual will, to shape the world as he sees fit. From this egocentric position, man and nature become the enemy, objects to be used.	This rhetoric also makes assumptions about people but they culminate in a view based on a win-win attitude. Achieving mutual goals is the end; cooperation is the means. Both audience and the other person are seen as intelligent, good and equal. Most important is for the speaker to understand, to seek a balance of views, and put himself in harmony with the rest of the world. Man and nature are persons and processes to be respected.

Why not try to inject the main features of Rogerian rhetoric into your classes? Surely with the world facing such difficult problems as population, pollution, limited food supplies, dwindling resources, and the constant threat of war an educational approach based on mutual trust and understanding makes a great deal of sense.

These are more than "motherhood" statements or appeals to conscience. The recent "energy crisis" and the Mid-East stoppage of crude oil flow should serve as an example that mankind MUST COOPERATE.

If we continue to exercise a win-lose philosophy in the long run there will be no winners - ALL will lose.

APPENDIX

President Nixon: "We are all in it together. This is a war. We take a few shots and it will be over. We will give them a few shots and it will be over. Don't worry. I wouldn't want to be on the other side right now. Would you?"

John Dean: "Along that line, one of the things I've tried to do, I have begun to keep notes on a lot of people who are emerging as less than our friends because this will be over some day and we shouldn't forget the way some of them have treated us."

President Nixon: "I want the most comprehensive notes on all those who tried to do us in. They didn't have to do it. If we had had a very close election and they were playing the other side I would understand this. No-they were doing this quite deliberately and they are asking for it and they are going to get it. We have not used the power in this first four years as you know. We have never used it. We have not used the Bureau and we have not used the Justice Department but things are going to change now. And they are either going to do it right or go."

John Dean: "What an exciting prospect."

President Nixon: "Thanks. It has to be done. We have been (adjecutive deleted) fools for us to come into this election compaign and not do anything with regard to the Democratic Senators who are running, et cetera. And who the hell are they after? They are after us. It is absolutely ridiculous. It is not going to be that way any more." (7)

BIBLIOGRAPHY

1. Ford, Gerald R., "In Defense of the Competitive Urge", Sports Illustrated, 41, No. 2, July 8, 1974. p. 17.

2. Nicklaus, Jack, "Shorten the Tour and Improve the Game", Sports Illustrated, 40, No. 19, May 13, 1974. p. 63.

3. Rogers, Carl R., Freedom to Learn, Charles Merrill Publishing Co., Columbus, Ohio (1969), pp. 290-291.

4. Clayton, Thomas E., Teaching and Learning a Psychological Perspective, Prentice Hall Inc., Englewood Cliffs, NJ, (1965), p. 85.

5. Gordon, William J.J., Synectics, Collier Books, Collier-MacMillan Ltd., London, England, (1961), p. 153.

6. Prince, George M., The Practice of Creativity, Collier Books, New York, NY (1970). p. 206.

7. The Presidential Transcripts, Dell Publishing Co., New York, NY (1974), pp. 37-38.

8. Mack, Dorothy, "Teaching Empathy in the Engineering School", paper presented at North-Central Section of ASEE meeting held in Ann Arbor, Michigan, April 1974. Paper published in the proceedings of that meeting.